

Docket No.: 13077-00140-US
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Friedrich Jonas et al.

Application No.: 10/057,027

Confirmation No.: 3582

Filed: January 24, 2002

Art Unit: 1712

For: ELECTROLUMINESCENT
ARRANGEMENTS

Examiner: D. S. Metzmaier

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

1 As required under § 41.37(a), this brief is filed more than two months after the Notice of
2 Appeal filed in this case on March 21, 2007, and is in furtherance of said Notice of Appeal.

3 The fees required under § 41.20(b)(2) are dealt with in the accompanying
4 TRANSMITTAL OF APPEAL BRIEF.

5 This brief contains items under the following headings as required by 37 C.F.R. § 41.37
6 and M.P.E.P. § 1205.2:

7	I.	Real Party In Interest
8	II	Related Appeals and Interferences
9	III.	Status of Claims
10	IV.	Status of Amendments
11	V.	Summary of Claimed Subject Matter
12	VI.	Grounds of Rejection to be Reviewed on Appeal
13	VII.	Argument
14	VIII.	Claims
15	Appendix A	Claims Appendix
16	Appendix B	Evidence Appendix
17	Appendix C	Related Proceedings Appendix

18 I. REAL PARTY IN INTEREST

19 The real party in interest for this appeal is:

20 H. C. Starck GmbH

21 II. RELATED APPEALS AND INTERFERENCES

22 There are no other appeals, interferences, or judicial proceedings which will directly
23 affect or be directly affected by or have a bearing on the Board's decision in this appeal.

1 III. STATUS OF CLAIMS

2 A. Total Number of Claims in Application

3 There are 4 claims pending in application.

4 B. Current Status of Claims

5 1. Claims canceled: 2, 3, and 6-8

6 2. Claims withdrawn from consideration but not canceled: 0

7 3. Claims pending: 1, 4, 5 and 9

8 4. Claims allowed: 0

9 5. Claims rejected: 1, 4, 5 and 9

10 C. Claims On Appeal

11 The claims on appeal are claims 1, 4, 5 and 9

12 IV. STATUS OF AMENDMENTS

13 Applicant did not file an Amendment After Final Rejection. Applicant did file a Request
14 for Reconsideration which was considered by the Examiner pursuant to the Advisory action
15 mailed February 20, 2007.

16 V. SUMMARY OF CLAIMED SUBJECT MATTER

17 Claim 1 states

18 A dispersion comprising:

1 polyanions;
2 cationic 3,4-polyalkyleredioxythiophenes; and
3 a solvent comprising water and optionally alcohol,
4 wherein said dispersion has a weight ratio of cationic 3,4-polyalkylene-
5 dioxythiophene to polyanion of from 1: 8 to 1: 25, and 90% by weight of the particles of
6 the dispersion being less than 40 nm. **[See the original claims 1, 2 and 6
7 and page 3, lines 23-26, page 5, lines 13-19 of the specification].**
8

9 VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

10 Claims 1, 4, 5 and 9 were rejected under 35 U.S.C. § 112, first paragraph, as based on a
11 disclosure which does not have an adequate written description.
12

13 VII. ARGUMENT

14 The outstanding Official Action has rejected claims 1, 4, 5, and 9 under 35 U.S.C. § 112,
15 first paragraph, as based on a disclosure which does not have an adequate written description.
16 The Examiner asserted in the Advisory Action that “Applicants arguments are not deemed
17 persuasive as they do not address that the subject matter is essential subject matter.” The
18 applicant respectfully disagrees.

19 The first step for preparing the applicant’s dispersion is preparing a 3,4-
20 polyethylenedioxythiophene/ polystyrene sulphonate dispersion in accordance with example 2 of
21 EP 0991303. This is disclosed in all the examples (examples 1-3) of the applicant’s specification.
22 Furthermore, the applicant states at page 3, lines 10-13 of the specification

1 Surprisingly, it has now been found that by further **reducing the size of**
2 **the particles**, the resistance of the 3,4-polyalkylenedioxythiophenes
3 described in EP-A 991 303 can be significantly increased without the
4 desired hole-injecting action being lost. (Emphasis added)
5

6 This also confirms that the first step for preparing the applicant's dispersion is preparing
7 a 3,4-polyethylenedioxythiophene/ polystyrene sulphonate dispersion in known by one of
8 ordinary skill in the art and refers to EP 0991303.

9 Then additional steps are taken to prepare the applicant's inventive dispersion. A person
10 skilled in the art would know how to make the dispersion according to the first step, i.e. example
11 2 of EP 0991 303 discloses the preparation of such a dispersion in a known manner -but a person
12 skilled in the art would not know the additional steps for preparing the applicant's inventive
13 dispersion.

14 The applicant stated in the middle of page 4 of their response filed on September
15 9, 2004:

16 One having ordinary skill in the art would not know how to make the
17 [applicant's claimed invention] dispersion comprising polyanions and
18 cationic 3,4-polyalkylenedioxythiophenes and water or a water/alcohol
19 mixtures as a solvent, wherein about 90% of the particles of the dispersion
20 are less than 50 nm and wherein the resistivity of the coating produced
21 therefrom by building a dispersion film and removing the solvent from the
22 dispersion film is at least 5000Ωcm, wherein the weight ratio of cationic
23 3,4-polyalkylene-dioxythiophene to polyanion have a ratio ranging from
24 between about 1:8 and about 1:25 and which was treated by high pressure
25 homogenization applying a pressure from 100 to 1000 bar of Applicants'
26 invention.
27

1
2 To establish that “one skilled in the art would have known how to make”
3 Applicants’ invention, the Examiner must establish a prima facie case of
4 obviousness....

5
6
7 In the final Office Action at page 2, the Examiner stated,

8 Applicants (page 4 of the response filed September 9, 2004) state that one
9 having ordinary skill in the art would **not** know how to make the claimed
10 dispersions and further state that the examiner has not provided a *prima*
11 *facie* case of obviousness regarding the making of the poly (3,4-
12 polyalkylenedioxythiophene.
13

14 As can be seen from the actual quote above, the Examiner cites parts of the above
15 response in a wrong way. EP 0991 303 does not disclose the preparation of the applicant’s
16 dispersion, but it describes — as mentioned above — the preparation of a “basic dispersion”,
17 which is the first step to make the applicant’s claimed inventive dispersion. As already pointed
18 out a person of ordinary skill in the art would know how to make this ‘basic dispersion’. The
19 additional steps which are necessary to prepare the applicant’s inventive dispersion are described
20 in the examples of the patent application.

21 Therefore, the argument of the Examiner that the skilled artisan, having the originally
22 filed specification would know how to make the applicant’s invention as filed is wrong. To
23 emphasize it again, the specification does have an adequate written description how to make the
24 applicant’s claimed invention as the preparation of the “basic dispersion” is known to a person
25 skilled in the art.

1

2 VIII. CLAIMS

3 A copy of the claims involved in the present appeal is attached hereto as Appendix A. As
4 indicated above, the claims in Appendix A include the amendments filed by Applicant on
5 March 21, 2006.

6 Applicant believes no fee is due with this response. However, if a fee is due, please
7 charge our Deposit Account No. 03-2775, under Order No. 13077-00140-US from which the
8 undersigned is authorized to draw.

Dated: June 21, 2007

Respectfully submitted,

Electronic signature: /Ashley I. Pezzner/
Ashley I. Pezzner
Registration No.: 35,646
CONNOLLY BOVE LODGE & HUTZ LLP
1007 North Orange Street
P.O. Box 2207
Wilmington, Delaware 19899
(302) 658-9141
(302) 658-5614 (Fax)
Attorney for Applicant

APPENDIX A- CLAIMS APPENDIX**Claims Involved in the Appeal of Application Serial No. 10/057,027**

Claim 1. (Previously presented) A dispersion comprising:

polyanions;

cationic 3,4-polyalkyleriedioxythiophenes; and

a solvent comprising water and optionally alcohol,

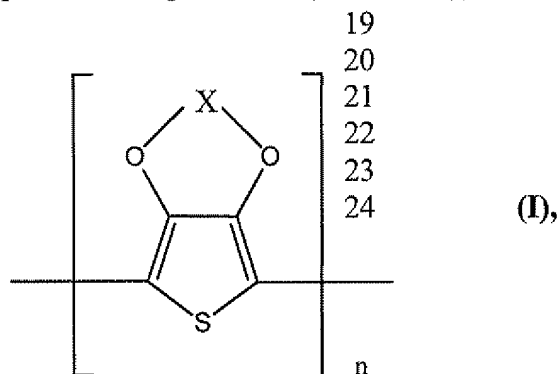
wherein said dispersion has a weight ratio of cationic 3,4-polyalkylene-

dioxythiophene to polyanion of from 1: 8 to 1: 25, and 90% by weight of the particles of the dispersion being less than 40 nm.

Claim 2. (Cancelled)

Claim 3. (Cancelled)

Claim 4. (Previously Presented) The dispersion according to Claim 1, wherein the 3,4-polyalkylenedioxythiophenes are represented by formula (I),



wherein,

n is an integer from 3 to 100, and

X is $-(CH_2)_x-CR^1R^2-(CH_2)_y-$, wherein

1 R^1 and R^2 , independently of one another, are selected from the group consisting
2 of H, an optionally substituted alkyl radical having from 1 to 20 carbon atoms, an aryl
3 radical having from 6 to 14 carbon atoms, and
4 $-CH_2-OR^3$,

5 wherein R^3 is selected from the group consisting of H, alkyl and
6 $-CH_2-CH_2-CH_2-SO_3H$,

7 and

8 x and y are each, independently of one another, an integer from 0 to 9.

9
10 Claim 5. (Original) The dispersion according to Claim 1, wherein the dispersion is a 3,4-
11 polyethylenedioxythiophene / polystyrene sulfonate dispersion.

12
13 Claims 6-8. (Cancelled)

14
15 Claim 9. (Previously Presented) The dispersion according to Claim 4, wherein n is an integer
16 from 4 to 15.

1

2

APPENDIX B - EVIDENCE APPENDIX

3

4

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the
examiner is being submitted.

5

6

7

1

2

APPENDIX C - RELATED PROCEEDINGS APPENDIX

3

4

No related proceedings are referenced in II. above, hence copies of decisions in related

5

proceedings are not provided.

6